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BUCHANAN, INGERSOLL & ROONEY PC
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER	
STELLING, LUCAS A	

ART UNIT	PAPER NUMBER
1797	

NOTIFICATION DATE	DELIVERY MODE
09/27/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com
offserv@bipc.com

Office Action Summary	Application No.	Applicant(s)	
	10/578,890	FROGGATT, KEITH	
	Examiner	Art Unit	
	Lucas Stelling	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 March 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *40-42,44,45 and 47-68* is/are pending in the application.

4a) Of the above claim(s) *50-59* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *40-42, 44,45, 47-49 and 60-68* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3-1-10 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 61 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There does not appear to be support in the originally filed disclosure for the limitation "wherein the mesh forming the or each decontamination member defines a predetermined pattern of open spaces."

4. Claim 63 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one

skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There does not appear to be support in the originally filed disclosure for the limitation "wherein the circulation member is a substantially fixed portion of the distribution system."

5. Claim 66 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There does not appear to be support in the originally filed disclosure for the limitation "wherein at least one decontaminating member floats and at least one decontaminating member sinks.".

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 40-42, 44, 47-49, 60, 62, 67, and 68 are rejected under 35 U.S.C. 102(b) as being anticipated by Ricci as evidenced by Heskett, Tompkins, and U.S. Patent No. 3,716,143 to Clark ("Clark").

8. As to claim 40, Ricci teaches a water distribution system **(See col. 3 lines 30-35, the sphere is placed in a bathtub, which tub is ordinarily part of a water**

distribution system; see also col. 1 lines 35-40; also look to Clark col. 2 line 65 -- col. 3 line 7 for evidence that a bathtub is a water using appliance that is properly considered part of a water distribution system), including one or more circulation members **(See in the Figures, especially Fig. 5; 10 and 12 combined)**, through which water can pass, wherein one or more decontamination members **(30 and 36 comprises a mesh of decontaminating filament material which is covered in a gauze-like fabric ball, see col. 3 lines 8-20)** are restrainably located within the or each circulation member and freely movably therein **(See in the Figures, the decontaminating member is restrained inside the circulation member by the gauze-like cover 30, but otherwise the decontaminating member is not attached and can move around inside the circulation member)**, the or each decontaminating member having an outer surface of an antibacterial material**(See Ricci col. 3 lines 40-47, the decontaminating member is composed of copper-zinc alloy; also look to Heskett col. 3 lines 25-35 for evidence that copper, zinc, and alloys thereof have bactericidal properties)**,

wherein the or each decontaminating member is in the form of a mesh **(See col. 3 lines 5-15, the filter material is composed of spun filaments of copper-zinc alloy which are formed into a steel wool-like mesh, and see Fig. 5; look to Tompkins for evidence that metal wool is considered a nonwoven mesh, Tompkins col. 8 line 16)**, and

wherein filter means are provided at an upstream part and/or downstream part of the or circulation member to prevent the decontaminating member or members passing out of the circulation member **(30 in the Figures and col. 3 lines 15-22; when the**

circulation member is placed into water, water rushes in through the holes 14 or 16 and contacts the alloy inside, see col. 3 lines 25-30. The fabric cover is therefore, at least downstream of the circulating member when it is placed into the water. Conversely, the cover is upstream of the circulation member when the member is withdrawn, and water drains out of it; the cover prevents filament, decontaminating member material from passing out of the circulation member, see col. 3 lines 15-22).

9. As to claim 41, Ricci teaches the system of claim 40, and in Ricci the decontaminating member fills most of the interior space, and therefore, it would be located in the lowermost part of the circulation member **(See in the Figures)**.

10. As to claim 42, Ricci teaches the system of claim 40, and in Ricci the decontaminating member round shaped to fit into the circulation member **(See in the Figures)**. The round shape is a contoured surface.

11. As to claim 44, Ricci teaches the system of claim 40, and in Ricci the metal wool has many passages between the filaments.

12. As to claim 47, Ricci teaches the system of claim 40, and the filter means are made from a copper-zinc alloy, which is antibacterial **(See Ricci col. 3 lines 40-47, and look to Heskett col. 3 lines 25-35, for further evidence that copper-zinc alloys are anti-bacterial)**.

13. As to claim 48, Ricci teaches the system of claim 40, and the filter means are in the form of a body of mesh material **(See col. 3 lines 5-15, the filter material is composed of spun filaments of copper-zinc alloy which are formed into a steel**

wool-like mesh, and see Fig. 5; look to Tompkins for evidence that metal wool is considered a nonwoven mesh, Tompkins col. 8 line 16).

14. As to claim 49, Ricci teaches the system of claim 40, and the body of mesh is almost the same size as the cavity of the circulation member allowing for a friction fit within the member **(See Ricci Fig. 5)**.

15. As to claim 60, Ricci teaches the system of claim 40, and in Ricci the filter means are provided at fluidly upstream and downstream parts of the or each circulation **(30 in the Figures and col. 3 lines 15-22; when the circulation member is placed into water, water rushes in through the holes 14 or 16 and contacts the alloy inside, see col. 3 lines 25-30. Conversely, the cover is upstream of the circulation member 10/12 when the member is withdrawn, and water drains out of it)**.

16. As to claim 62, Ricci teaches the system of claim 40, and the circulation member is connected to the distribution system by being placed in contact with the water in the system **(See Ricci col. 3 lines 25-35)**. The circulation member of Ricci also has inlets and outlets and is put in fluid communication with the water **(See 16 and 14 in the Figures)**.

17. As to claim 67, Ricci teaches a water distribution**(See col. 3 lines 30-35, the sphere is placed in a bathtub, which tub is ordinarily part of a water distribution system; see also col. 1 lines 35-40; also look to Clark col. 2 line 65 -- col. 3 line 7 for evidence that a bathtub is a water using appliance that is properly considered part of a water distribution system)** system having a water source, said water distribution system comprising:

at least one circulation **(See in the Figures, especially Fig. 5; 10 and 12 combined)** member through which water can pass, the at least one circulation member having a water inlet, in fluid communication with the water source of the water distribution system, and a water outlet **(See 14 and 16, which function as inlets and outlets in communication with the water)**;

at least one decontaminating member **(30 and 36 comprises a mesh of decontaminating filament material which is covered in a gauze-like fabric ball, see col. 3 lines 8-20)** restrainably located with the at least one circulation member and freely movable therewithin **(See in the Figures, the decontaminating member is restrained inside the circulation member by the gauze-like cover 30, but otherwise the decontaminating member is not attached and can move around inside the circulation member)**, the at least one decontaminating member having an outer surface of an antibacterial material **(See Ricci col. 3 lines 40-47, the decontaminating member is composed of copper-zinc alloy; also look to Heskett col. 3 lines 25-35 for evidence that copper, zinc, and alloys thereof have bactericidal properties)**, wherein the at lest one decontaminating member is in the form of a mesh **(See col. 3 lines 5-15, the filter material is composed of spun filaments of copper-zinc alloy which are formed into a steel wool-like mesh, and see Fig. 5; look to Tompkins for evidence that metal wool is considered a nonwoven mesh, Tompkins col. 8 line 16)**, and

filter means provided in the at lest one circulation member at an upstream part and/or downstream part thereof in order to prevent the at least one decontaminating

member from passing out of the at least one circulation member **(30 in the Figures and col. 3 lines 15-22; when the circulation member is placed into water, water rushes in through the holes 14 or 16 and contacts the alloy inside, see col. 3 lines 25-30. The fabric cover is therefore, at least downstream of the circulating member when it is placed into the water. Conversely, the cover is upstream of the circulation member when the member is withdrawn, and water drains out of it; the cover prevents filament, decontaminating member material from passing out of the circulation member, see col. 3 lines 15-22)**.

18. As to claim 68, Ricci teaches the system of claim 67, and in Ricci the decontaminating member fills most of the interior space, and therefore, it would be located in the lowermost part of the circulation member **(See in the Figures)**.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

21. Claims 45 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ricci as evidenced by Heskett, Tompkins, and Clark.

22. As to claim 45, Ricci as evidenced by Heskett and Tompkins teaches the system of claim 40, but Ricci does not mention using multiple decontaminating members. The use of multiple spheres would be an obvious duplication of parts, as it would provide for additional treatment material which would allow for a more rapid treatment of liquid. See also MPEP 2144.04(VI)(B). The units will either float or sink depending on their buoyancy.

23. As to claim 61, Ricci as evidenced by Heskett, Tompkins, and Clark teaches the system of claim of claim 40, but Ricci contemplates that zinc-copper alloy is a metal wool, but does not mention that the member defines a predetermined pattern of open space. However, a person of ordinary skill in the art would have known that the filaments should be essentially evenly spaced in the circulation member in order to provide for maximum utilization; and the person having ordinary skill would also recognize that the spaces must be open enough to allow water to fully circulate through the member allowing for efficient contact with anti-bacterial filaments throughout the entire member. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to predetermine even spacing and enough open space to allow free circulation of water through the member; thereby providing a random pattern of essentially evenly spaced openings through the member.

24. Claim 63 and 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ricci as evidenced by Heskett, Tompkins, and Clark and in view of U.S. Patent No. 4,853,131 to Etani ("Etani") and U.S. Patent No. 5,008,011 to Underwood ("Underwood").

25. As to claims 63 and 64, Ricci as evidenced by Heskett, Tompkins, and Clark teaches the system according to claim 40, but Ricci does not teaches that the circulation member is a substantially fixed portion of the distribution system such as a pipe, showerhead, or calorifier. Underwood is directed to a showerhead which contains a filter material of copper/zinc metal alloy **(See Underwood abstract)**. Underwood provides the decontaminating material in the showerhead so that the water will be treated **(See again Underwood abstract)**. Etani is directed toward a round water treatment module **(See Etani in the Figs. and abstract)**. Etani provides that the round treatment module inside of a larger velocity chamber or circulation member allows for it stir around and a sloshing around in use **(See Etani e.g. col. 2 lines 20-40)**. A person having ordinary skill in the art at the time of invention would have found it obvious to provide the decontamination member of Ricci in an alternative circulation member such as that shown in Underwood, and to size the decontamination member and chamber so that the member stirs around and sloshes about during use, as shown in Etani, thereby providing efficient contact with the decontamination unit, and also thereby providing the circulation member as a fixed portion of the system such as a showerhead.

26. Claim 65 rejected under 35 U.S.C. 103(a) as being unpatentable over Ricci, as evidenced by Heskett, Tompkins, and Clark in view of U.S. Patent Application Publication No. 2002/0144958 to Sherman ("Sherman").

27. As to claim 65, Ricci as evidenced by Heskett, Tompkins, and Clark teach the system of claim 40, but Ricci does not mention the use of silver material. Sherman is directed to a water treatment system, which uses a silver material with copper and zinc is used in order to provide silver to the water thereby suppressing bacterial, fungal and algal growth **(See Sherman abstract and see [0055] and [0056])**. Therefore, a person having ordinary skill in the art at the time of invention would have found it obvious to provide for silver in addition to copper and zinc in Ricci in order to treat the water with silver, thereby forming a silver material with an outer surface.

28. Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ricci as evidenced by Heskett, Tompkins, and Clark in view of U.S. Patent No. 5,011,602 to Totani et al. ("Totani").

29. As to claim 66, Ricci as evidenced by Heskett, Tompkins, and Clark teaches the device of claim 45, and as discussed above for claim 45, it would have been an obvious duplication of parts to provide multiple treatment units as shown in Ricci. But, Ricci does not mention that at least one unit would float and at least one unit would sink. Totani is drawn to a water treatment material in which silver, copper and zinc are used at the treatment materials **(See Totani col. 3 lines 5-20)**. Totani teaches adding a float to the treatment unit in order to keep the treatment unit afloat **(See Totani col. 11 lines**

33-- col. 12 line 35). A person having ordinary skill in the art at the time of invention would have recognized the benefit of providing a sinking unit and one with a float as providing treatment at different levels within the water. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to provide a float on one of the treatment units so that one of the units will float and another will sink, thereby providing additional treatment at different levels within the water.

Response to Arguments

30. Applicant's arguments filed 3-1-10 have been fully considered but they are not persuasive.

31. Applicant first argues with respect to the 102(b) rejection of claim 40, that the bathtub in Ricci is not properly considered part of a water distribution system. Applicant alleges that the tub is not part of the system but is a receptacle that water is distributed to and drained from, but that this is not part of the system. In response, the examiner directs applicants attention to Clark col. 2 line 65 -- col. 3 line 7 that a bathtub is a water using appliance that is properly considered part of a water distribution system.

32. Applicant next argues that the spheres 10/12 are not part of the water distribution system and that they therefore cannot be regarded as circulation members. In response, placement of the spheres within the tub, and therefore, the system meets the limitation of claim 40 of "a water distribution system, including one or more circulation members."

33. Applicant then argues that the spheres in Ricci are used in the bathtub which is drained after each use, and then concludes that the spheres are not intended to sit in

water for long periods of time in a confined area to kill bacteria as are the decontaminating members of the claimed invention. In response, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

34. Applicant next argues that the decontaminating member is not freely movable within the circulation member. Applicant alleges that the figures show a close fit and that this is by no means freely moveable. In response, there is nothing binding the decontaminating element, therefore they are freely moveable within the confines of the circulation member 10/12.

35. Applicant then argues that there is no stream when the balls of Ricci are placed in a bathtub. In response, the stream of water appears to be a recitation of applicants intended use. Moreover, Ricci contemplates moving the ball through the water which will create currents in the water **(See Ricci col. 3 lines 25-35)**.

36. As to claim 41, Applicant alleges that the recitation that the decontaminating members will locate in a lowermost part of the circulation member implies in conjunction with "freely movable" that there is a different size between the decontaminating member and the circulation member and that other relative locations are possible. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., difference in size, and possible other relative locations) are not recited in the rejected claim(s). Although

the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In Ricci, the decontaminating member will be located in the lowermost part of the circulation member 10/12 when no water is passing through it.

Conclusion

37. Applicant next argues with respect to claim 45 that multiple members are not shown which respectively float or sink. Applicant then argues that Tompkin is in an entirely different art and does not teach bouyancy, and that Heskett also does not contemplate bouyancy. In response, claim 45 does not appear to require bouyancy, claim 45 only appears to require that there are a plurality of decontaminating members which either sink or float in water. Given its broadest reasonably interpretation, this could encompass all of the decontaminating members, and does not require a group where some float and some sink. Moreover, although applicant addresses the other references of Tompson and Heskett, these references are evidentiary references used to support the anticipation rejection and are not particularly relied as 103 secondary references. The rejection of claim 45 is based on duplication of parts case law. See MPEP 2144.04(VI)(B), *the mere duplication of parts is not patentably significant unless new and unexpected results are produced.* In this case additional treatment units will simply provide for additional treatment material.

38. Newly added claims are addressed in the rejection above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucas Stelling whose telephone number is (571)270-3725. The examiner can normally be reached on Monday through Thursday 12:00PM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Las 9-21-10

/Matthew O Savage/
Primary Examiner, Art Unit 1797